Ray da Silva Rosa

President's Address at the 2016 AGM of the UWA Academic Staff Association

CONFECTED CRISIS IN AUSTRALIAN UNIVERSITIES

Australian academics are besieged by claims that (a) universities' viability is threatened by the "uberfication of education"[1] and the entry of commercial providers[2], (b) that levying higher fees on domestic students will allow an "Aussie Harvard" to emerge[3] and, most recently, (c) that our funding arrangements are immoral because fees from foreign students subsidise local students[4]. The effect is to engender a sense of crisis, imply underperformance, and undermine the sector's ethical standing and morale. No matter that Australian universities are doing better than ever in attracting students or on measures of research[5], it is always five minutes to midnight.

Underlying the sheet of charges and threats against Australian universities is the belief that introducing market forces will resolve them. For instance, Michael Spence, VC of Sydney University and Chair of the Go8, argues "some form of price signal for domestic students, [would enable] universities to better

---

[1] "Digital disruption and academia: Are we ready for Uberversities in 10 years?" by Linda Kristjanson, Vice Chancellor of Swinburne University, *Sydney Morning Herald* 11 October 2015. See also "An Über lesson for Australian university brands" *Venus Education* 11 May 2016 http://www.venus-education.com/uber-lesson-australian-university-brands/

[2] "Universities face corporate threat, warns UWA VC" by Tim Dodd *Australian Financial Review* 14 Nov 2014

[3] "Uni fees: Let the free market rip to create an Aussie Harvard" by Matthew Knott *Australian Financial Review* 24 April 2014

[4] "Sydney Uni's Michael Spence: It's 'immoral' to tax poor Sichuan families to subsidise kids who went to Kings" by Kelsey Munro *Sydney Morning* Herald 12 August 2016

[5] *Times Higher Education* reports, "Australia has the third highest number of international students in the world behind the UK and the US – pretty impressive for a nation of just 23 million people" ("Best University in Australia 2017, Times Higher Education online, 4 July 2016).

Education is Australia's third largest export industry soaring by 13% in 2015 to around $20 billion ("Education revenue soars to become Australia's $20 billion export" *Australian Financial Review* 3 February 2016).

The increase in export dollars has been accompanied by a remarkable increase in research output. Andrew Norton reports that "over the decade between 2002 and 2012, the weighted number of publications by university staff increased more than 90 per cent from about 32,000 to 61,000" ("The case nexus: how teaching funds research in Australian universities" Grattan Institute, November 2015).

The increase in research quantity has not been at the expense of quality. The ARWU, a purely research-based ranking of universities, had six Australian universities in the world's top 100 in 2016, the most ever. Tony Shiel, an expert in university rankings, has observed, "from having just 13 universities listed on the inaugural ARWU rankings in 2003 to 23 in the latest list, Australia is one of the success stories of international higher education" ("ARWU ranking: Six Australian universities in top 100 a first" by Julie Hare, *The Australian* 15 August 2016).

match fees to delivery costs, invest in quality, and target income support packages for students from lower socio-economic backgrounds"[6]. It's unclear how the answer to competing against low-cost, on-demand degrees delivered via the internet (i.e., "uberfication") is higher fees. This detail aside, Professor Spence's proposition would be more credible if Australian universities didn't already earn up to $3.2 billion more from students than they spend on teaching[7]. As the Grattan Institute's Andrew Norton says, funds from fee increases are likely to be spent on research, not teaching[8].

The curious case of universities diverting student fees to research whilst fretting about competition from low cost commercial providers and simultaneously pleading for the right to charge domestic students higher fees highlights what eminent American education scholar Gordon Winston called "the awkward economics of higher education"[9].

Research-intensive universities are notorious for poorer attention to teaching yet they attract students. This leads economists Michael Rothschild and Lawrence White to observe that it is not obvious that undergraduate fees subsidise research in research-intensive universities; otherwise, in a competitive market, teaching only universities and colleges would attract a higher fee premium and/or better students. In practice, the reverse is true[10]. Rothschild and White contend that "[b]eing part of a research university confers considerable benefits to undergraduates, benefits for which they are willing to pay

[6] Op Ed by Michael Spence *Australian Financial Review* 3 October 2016, p. 39.

[7] "The case nexus: how teaching funds research in Australian universities" by Andrew Norton, Grattan Institute, November 2015, p. 1.

[8] "Grattan Institute says money raised by higher university fees likely to go into research" by Matthew Knott *Sydney Morning Herald* 1 Nov 2015. Norton is not alone. Professor Stephen King, whose orthodox economic credentials can hardly be bettered, being co-director of the Business Policy Forum at Monash University, former Dean of the Faculty of Business and Economics at Monash, and member of the Australian Competition and Consumer Commission from 2004-2009, believes "fee deregulation is a recipe for disaster" and that it is "a classic case where government had failed to think through the implications". He says, "I wouldn't be betting on much of that money going back into improved undergraduate education" ("University fee deregulation a 'recipe for disaster', says expert Stephen King" by Bernard Lane *The Australian* 24 September 2014.)

[9] Winston coined the phrase in an article worth reading (and very readable): "Subsidies, hierarchy and peers: The awkward economics of higher education." 1999, *Journal of Economic Perspectives* v13(1): 13-36.

[10] Andrew Norton and Ittima Cherastidtham from the Grattan Institute report "[i]n Australia, it is not unusual for the most expensive university to charge double or more the fee of the cheapest university offering the same course. This does not deter international students. Despite the cost, in most disciplines expensive courses attract more students than cheap courses. There are clear university patterns to international student fees charged: on average, the Group of Eight universities have the highest fees, followed by technology universities, the Innovative Research Universities which were typically founded in the 1960s and 1970s, and the Regional Universities Network members, which usually date from the 1990s" ("The price of prestige: how university status affects fees" by Andrew Norton and Ittima Cherastidtham 30 August 2015 https://theconversation.com/the-price-of-prestige-how-university-status-affects-fees-46803)

both in money and in the acceptance of what some deem a poorer educational technology - larger classes and graduate student instructors"[11].

Rothschild and White's point is useful in reminding us that the research-intensive university, for all its visible shortcomings, provides a competitive package overall that is likely to survive the challenge from more focused commercial providers that take advantage of ostensibly disruptive technology. This isn't just wishful thinking. The evidence from the marketplace is unambiguous and compelling. Jonathan Knee, a professor at Columbia Business School and former investment banker, has a forthcoming book "Class Clowns: How the Smartest Investors Lost Billions in Education" where he documents how "investors aiming to start an education revolution have, with regularity lost their shirts".

Tellingly, Knee observes, "the greatest educational-business successes have come from a series of targeted, incremental steps forward within tightly defined markets. Recent examples include a business based on plagiarism detection; another that provides tools to high-school students and guidance counselors for college and career selection; and another that delivers day care and early-learning programs sponsored by employers "[12]. These successful educational-businesses are all worthy enterprises but they hardly threaten, or even intrude on, the activities the traditional university, being complementary businesses rather than in direct competition.

What makes research-intensive universities attractive to students?

The attraction to students of attending research-intensive universities is of two kinds: firstly, given higher admission standards, students who are admitted and pass the courses send a credible and valuable signal of quality to prospective employers[13] and, secondly, the quality of education students receive is determined in large part by the attributes of their peers[14]. These two considerations have a practical implication for universities. There is a trade-off between maximising student revenue and offering a high quality educational experience by being selective in choice of students.

The above point reveal the unreality of (former) Group of Eight Universities Chair Ian Young's claim

---

[11] Rothschild, Michael, and Lawrence J. White. "The university in the marketplace: Some insights and some puzzles." In Studies of supply and demand in higher education, pp. 11-42. University Of Chicago Press, 1993.

[12] A useful summary of the arguments in *Class Clowns* is available at "Why For-Profit Education Fails: by Jonathan A. Knee *The Atlantic* November 2016.

[13] In case this seems far-fetched, American economist Michael Spence (not the University of Sydney VC) shared a Nobel Prize in 2001 for developing the theory that generated the implication that a major benefit of attending university is the signal of quality it sends to employers. In light of the theory, it is not surprising that stories of universities letting entry standards slip unleash intense emotions. Graduates believe their degrees are being devalued. This wouldn't be a concern if degrees were merely about certification of competence.

[14] Winston (1999) states "[i]nputs of faculty and facilities matter, too, of course, but the quality of both individual students and of the student body as a group counts for a great deal in the quality of educational services the institution delivers" (p. 17).

that "letting market forces decide how much students pay for degrees would allow Australian universities to compete on quality with prestigious institutions such as Harvard and Stanford" [15]. Elite US universities heavily subsidize their students to maximise their ability to shape each incoming class. For example, Harvard Business School offers an MBA that regularly ranks no 1 in the world, attracts many thousands more applications than it can accept and its graduates earn amongst the highest salaries on offer. One might expect HBS's fees to include provision for a healthy surplus. However, HBS "sets MBA tuition and fees at levels that do not fully recover annual operating expenses, much less the School's long-term investments in MBA program innovation"[16].

The subsidy of higher education is common. I've included an appendix that shows the scale of the subsidy in the US, where market forces in higher education are most prevalent and so where we might expect the subsidies to be lowest. In Australia the subsidy is less obvious because, in addition to government research funding, a major channel of subsidy is government-funded credit to students at below market rates of interest and generous repayment terms, which is why it is claimed students are price insensitive[17]. To the extent students are price insensitive, it reduces the usefulness of price signals as an indicator of where universities should allocate resources and it allows universities with market power (i.e., the research intensive universities) to charge more without affecting demand. I imagine this accounts for a large part of the appeal to the Go8 universities of "fee deregulation".

The large-scale subsidy of higher education has the important implication that the ability of for-profit motivated entrepreneurs to disrupt the sector and force the universities to adapt is limited: it's hard to compete against a heavily subsidized product that has considerably more prestige. There is a market for off-campus higher education but it is most likely going to target a different audience that, for a variety of reasons, wouldn't enrol in a traditional campus-based university course [18]. The new technologies being introduced in education are an unequivocally good thing; they just aren't going to be anywhere near as disruptive of universities as many seem to devoutly hope.

The obvious risk to campus-based universities is that budget stresses and the appeal of deregulation will reduce the subsidies provided. Indeed, the subsidy is something of a puzzle given the well-documented wage premium earned by graduates. It is also arguably iniquitous given that the more prestigious

---

15 "Uni fees: Let the free market rip to create an Aussie Harvard" by Matthew Knott Sydney Morning Herald 24 April 2014)

16 Source: Harvard Business School 2012 Financial Report http://www.hbs.edu/annualreport/2012/financials/supplemental-info.html.

17 Andrew Norton and Ittima Cherastidtham state "Domestic undergraduates may also be less price sensitive than postgraduates. For school leaver undergraduates HELP repayments are many years away, reducing their price sensitivity" (ibid, 2015)

18 US university Georgia Tech offers high regarded Master of Computer Science degree online for just $7,000. A study found that the student who enrolled did not fit the traditional profile of masters students. For them, the Georgia Tech offering was not an alternative choice to studying on campus. It was the only viable option. ("An Online Education Breakthrough? A Master's Degree for a Mere $7,000" by Kevin Carey *New York Times* 28 Sept 2016)

universities get the higher subsidy and their student body includes a disproportionate number of students from families who are well-off[19]. At least part of the answer is society's desire to shape or influence minds and/or tilt the field in favour of development of particular skills and competencies. It seems people across the spectrum of ideologies implicitly endorse John Stuart Mill's view that "the uncultivated cannot be competent judges of cultivation", which implies leaving higher education entirely to the free market is risky if you want to cultivate the best and brightest in your preferred style.

In closing, I have shown (I hope) the economic naivety of the argument that allowing market forces to operate in higher education will result in better outcomes in quality and equity. I also hope to have persuaded you that the research-intensive university has as promising a future now as it did, say, 50 years ago. By the performance metrics that are common in industry – e..g., export dollars, increase in size of market, and social impact of activities – Australian universities have never performed better. There are, however, valid questions of educational quality, equity and moral responsibility that universities need to address. These are, I think, far more interesting and vital challenges than the confected threat to the existence of universities posed by ostensibly "disruptive" technologies.

Appendix A
Higher Education Subsidies in the US

"Colleges always charge a price that fails—significantly—to cover their production costs."

Source: "The analytics of the pricing of higher education and other services in which the customers are inputs" by Michael Rothschild and Lawrence J. White. *Journal of Political Economy* 103.3 (1995): 573-86.

"The tuition and fees charged by public instiutions are quite consciously set below any plausible estimate of what it costs to educate a student; the same is as true of high-quality liberal arts colleges as it is for the major private and public universities."

Source: Winston, Gordon, and David Zimmerman. "Peer effects in higher education." In College choices: The economics of where to go, when to go, and how to pay for it, pp. 395-424. University of Chicago Press, 2004.

"Carolyn Ainslie, Cornell vice president for planning and budget observed that although tuition keeps rising, "the cost to educate a Cornell student is actually twice that of the sticker price to attend the university.""

[19] It is presumably this point that prompted the Chancellor Dr Michael Chaney to say, "I am a bit bewildered to see left-wing students campaigning for lower fees on the basis that people who don't go to university should be funding their education … What they're saying is people who don't go to universities should through their taxation be funding university students who, in due course, earn higher income" (Uni chief blasts fee protests" *The West Australia*n 28 March 2014)

Source: http://www.news.cornell.edu/stories/2006/11/why-tuition-costs-so-much-three-cornell-experts-explain

---

"The most recent national data show that the average student subsidy in US higher education is a cool $8,700 a year – the student buys an education from the average college or university that costs $12,800 to produce and she pays only $4,100 for it.

The immediate questions, of course, are "Why?" and "Where does the money come from?" And the answers are just as immediate: "Because society considers higher education A Good Thing, it subsidizes the price to encourage more people to buy more of it." Private donors give gifts to cover operating costs or to build buildings or endowments and governments use their taxing power to generate public appropriations to support college and university education."

Source: Winston, Gordon C. (2000) : Economic stratification and hierarchy among US colleges and universities, WPEHE discussion paper series / Williams College, Williams Project on the Economics of Higher Education, No. 58

"[W]e not only estimate the size of those [government] subsidies but also show that they are distributed in such a way that the more selective a school is and the fewer low-income students it serves, the larger its taxpayer subsidy. In other words, most taxpayers are spending far more money to educate students in the country's elite institutions than they spend to support their own children at the less-selective schools they likely attend .... For public institutions, tax-payers are investing more than $60,000 for each bachelor's degree granted in the three less competitive categories, close to $75,000 in the highly competitive institutions, and more than $100,000 for each bachelor's degree granted in the most competitive flagship institutions. ....Taxpayer costs for bachelor's degrees in private institutions range from a net profit of more than $6,000 per degree from for-profit institutions to a net cost of around $8,000 for not-for-profits in every category of selectivity except the most selective ones, where the costs jump to more than $58,000 per degree." (p. 3).

Source: "Cheap for Whom? How Much Higher Education Costs Taxpayers" by Mark Schneider and Jorge Klor de Alva No. 8 • October 2011 American Enterprise Institute for Public Policy

---

"A significant portion of most US business schools' operating budgets (up to 40% in some schools) is covered by donations from their alumni and, to a lesser extent, support from the corporate sector, as well as income from endowed gifts. Non-US schools will have no choice but to follow that path, particularly institutions that have the ambition to rank among the top-tier schools."

Source: Hawawini, G. (2005). The future of business schools. Journal of Management Development, 24(9), 770-781.

"I want to make this very explicit – that student quality is assumed to be an input in the school's production function for educational services. … Student peer quality is, in terms of educational services, seen to be a genuinely productive input to education. Students who go to school with good students will, cet. par, get more/better education than those who go to school with weak students. This is addressed by empirical evidence in the next section. It is assumed, further, that schools know this about their production process and that awareness motivates their selectivity in admissions – in the interests of student, hence institutional, quality, they have an incentive to restrict sales and capacity in order to improve the quality of their peer input.

In the market for peer quality, two things are central: (a) peer quality is scarce among students and its distribution among them is highly skewed so that not many of those hoping to sell peer quality have a whole lot of it to sell. And (b) on the schools' side of the market, donative revenues – non-price revenues – are scarce among colleges and their distribution, too, is highly skewed. So not many colleges hoping to buy peer quality can afford to pay very high wages for it. Most schools will be outbid by the few that pay the highest peer wages resulting in a concentration of the best students at the highest subsidy schools."

Source: "Peer Effects in Higher Education" by Gordon Winston, David Zimmerman in College Choices: The Economics of Where to Go, When to Go, and How to Pay For It Volume Author/Editor: Caroline M. Hoxby, University of Chicago Press Volume ISBN: 0-226-35535-7 Volume URL: http://www.nber.org/books/hoxb04-1 Conference Date: August 13-15.